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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,813	03/18/2004	Masato Yamaguchi	250489US6	5876
22850	7590	12/11/2007		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER DRAVININKAS, ADAM B	
			ART UNIT 2627	PAPER NUMBER
			NOTIFICATION DATE 12/11/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	Application No. 10/802,813	Applicant(s) YAMAGUCHI ET AL.	
	Examiner Adam B. Dravininkas	Art Unit 2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2007 and 31 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 9 October 2007 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear as written, how the invention would work in view of claim 1 wherein the disk is first "convey[ed] ...in a horizontal direction...and thereafter lower[ed] ...vertically" in lines 3-5. In this configuration, claim 6 would make the device inoperable with the limitation of "said disk oriented in a vertical direction" in line 4.

It is assumed, for purposes of this office action that "said disk oriented in a vertical direction" should be - - said disk oriented in a horizontal direction - -.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuichi et al. (JP 05-120781) in view of Kanazawa et al. (US 5,933,291).

Re. claims 1 and 4-6: Katsuichi et al disclose a disk recording and reproducing device, comprising:

a slide member (5) which is slidably driven by a drive unit (30) through a rack (35) to convey a disk (1) in a horizontal direction (a') from a disk ejecting position (fig. 2) and thereafter lower the disk vertically and position the disk in a disk writing/reading position (fig. 4) in which information can be written on and read from the disk by an optical pickup (not shown), (see drawings 2-10; paras. 0009, 0017-0019)

said disk recording and reproducing device has a detecting unit (20, 21) on a chassis (14) thereof for being electrically detected by said switch trigger; and (see drawings 1a-c, 2-4; paras. 0013-0014)

said disk is a cartridge-type disk (2). (see drawings 1a-c, 2-4, 9, 10;  
abstract, para. 0009)

said slide member further comprising horizontal (12) and vertical (10)  
guide grooves that jointly form substantially L-shaped guide grooves, with said  
disk oriented in a vertical direction. (see drawings 9 and 10)

Katsuichi et al. fails to disclose or fairly suggest:

said slide member has a switch trigger, said detecting unit is configured to  
detect a disk standby position which is between said disk writing/reading position  
and said disk ejecting position, and, in a standby mode, the disk is moved and  
placed at said disk standby position based on the detection of the disk, said disk  
is stopped in said disk standby position on upward movement thereof by the disk  
recording and reproducing device while said disk is conveyed from said disk  
writing/reading position toward said disk ejecting position;

wherein, in said disk standby position a surface of the disk is spaced from  
an objective lens by a distance to prevent said objective lens from contacting the  
surface of said disk even when said objective lens is moved in a movable range  
thereof;

wherein said detecting unit has a pair of switches which turn on/off  
according to a position of said switch trigger of said slide member and detects  
the disk ejecting position; and

said disk writing/reading position, and said disk standby position based on a combination of the turning on and off of said pair of switches.

Kanazawa et al. discloses:

a detecting unit which has a pair of switches (326,328) which turn on/off according to a position of said switch trigger of said slide member and detects the disk ejecting position, said disk writing/reading position, and said disk standby position based on a combination of the turning on and off of said pair of switches; (see figs. 64a-e, 65; col. 20 lines 21-41)

a slide member has a switch trigger (322, 324), (the encoder ribs 322, and 324 interrupt the loading sensors 326 and 328) (see col. 20 lines 50-65)

said detecting unit is configured to detect a disk standby position which is between said disk writing/reading position and said disk ejecting position, and, in a standby mode, the disk is moved and placed at said disk standby position based on the detection of the disk, said disk is stopped in said disk standby position on upward movement thereof by the disk recording and reproducing device while said disk is conveyed from said disk writing/reading position toward said disk ejecting position; (see col. 2 lines 16-33)

wherein, in said disk standby position a surface of the disk is spaced from an objective lens by a distance to prevent said objective lens from contacting the surface of said disk even when said objective lens is moved in a movable range thereof. (see fig. 47; col. 22 lines 54-67) (the optical head 16 does not contact the disk 12)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the cartridge detection system of Katsuichi et al. with the cartridge detection system of Kanazawa et al. One of ordinary skill in the art would have been motivated to do this in order to provide a disk cartridge loading system for a disk drive that draws a cartridge into a cartridge holder and moves the cartridge holder into a reading/writing position using very few sensors and parts in a single, smooth motion. (see Kanazawa et al. col. 1 lines 44-48)

### ***Response to Arguments***

6. Applicant's amendments to the claims have been entered. The rejection under 35 USC 112, second paragraph of claims 1, 4, and 5 has been withdrawn.

7. Applicant's arguments, see page 4, filed 9 October 2007, with respect to the rejection(s) of claim(s) 1, 4, and 5 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made under 35 USC 103(a) as being obvious over Katsuichi et al. in view of Kanazawa et al. above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam B. Dravininkas whose telephone number is (571) 270-1353. The examiner can normally be reached on Monday - Thursday 9:00a - 6:00p.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ABD  
/Adam Dravininkas/  
December 4, 2007

  
ANDREA WELLINGTON  
SUPERVISORY PATENT EXAMINER